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**MIN**(10) **Pub. No.: US 2017/0100096 A1**(43) **Pub. Date: Apr. 13, 2017**(54) **ULTRASOUND DEVICE AND METHOD OF  
PROCESSING ULTRASOUND SIGNAL**(71) Applicant: **SAMSUNG MEDISON CO., LTD.**,  
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**8/5207** (2013.01); **A61B 8/5269** (2013.01);  
**A61B 8/145** (2013.01)(57) **ABSTRACT**

An ultrasound device includes: a plurality of transducers constituting a two-dimensional (2D) probe; a signal processor configured to generate non-inverted signals based on first signals received from first transducers of a first group from among the plurality of transducers and to generate inverted signals based on second signals received from second transducers of a second group from among the plurality of transducers; a beamformer configured to generate a first summing signal corresponding to the non-inverted signals by performing beamforming on the non-inverted signals and to generate a second summing signal corresponding to the inverted signals by performing beamforming on the inverted signals; and a differential amplifier configured to differentially amplify the first summing signal and the second summing signal.

